ATTORNEY DOCKET NO.: BAL-17-CON2 (BA-00136.2)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of ALLAN F. WILLIS ET AL. Serial No.: NOT YET ASSIGNED Filed: HEREWITH For: CATHETER WITH DISTALLY DISTENDING BALLOON	))))))))	Examiner: UNKNOWN Art Unit: UNKNOWN

PRELIMINARY AMENDMENT

Commissioner of Patents
U.S. Patent and Trademark Office
Washington, D.C. 20231

Sir:

The present application is being filed as a Continuation Application of Serial No. 09/372,133 in order to prosecute claims corresponding essentially to claims 31 through 35 of the parent '133 application.

In an Office Action dated February 14, 2000, in the parent '133 application, claims 31 and 32 of the parent application were rejected under § 102(b) as anticipated by Mackin '710. Claims 33 through 35 were rejected under § 102(b) as anticipated by Brill '333. Applicants respectfully submit that claims 1 through 5 of the present application patentably distinguish over the cited references.

Claim 1 particularly calls for the distal and proximal ends of the balloon to be attached to the shaft at a distance apart that is less than the unattached length of the balloon between its distal and proximal ends. By attaching the balloon to the shaft in this configuration, a plurality of gathers are formed in the balloon. Upon inflation of the

balloon, the gathers cause a portion of the balloon to migrate distally over the first annulus. This unique configuration is not disclosed in Mackin '710.

According to Mackin '710, the balloon is preformed so as to define the "working well 8." The specification describes at column 4, lines 45-51, that the balloon is formed by dipping a pre-shaped glass rod and ball into polyurethane, withdrawing the rod and ball, and allowing the polyurethane to dry. Thus, the balloon is pre-formed with the uninflated shape illustrated in Figs. 3 and 4 of the '710 patent. The balloon is illustrated in its inflated state in Figs. 5 and 12. The balloon is not attached to the shaft so as to form a plurality of gathers between the attachment points that allow the balloon to migrate over the tip or first annullus of the shaft. Accordingly, applicants respectfully submit that independent claim 1 patentably distinguishes over Mackin '710.

Independent claim 3 calls for the balloon to include a plurality of a adjacent annular restraining rings formed integrally with the balloon between its proximal and distal ends. The restraining rings limit radial expansion of the balloon at the central location of the rings between the proximal and distal ends, not between the "rings" as illustrated and described in Brill '333. Also, the rings enable generally uniform or full circumferential expansion of the balloon on each side of the rings radially beyond the rings when the balloon is inflated. According to Brill '333, the expanded portion of the balloon on each side of a "ring" 46 is in the shape of a less than fully circumferential lobe 32a-32g. According to Brill '333, the lobes 32a-32g are required to define a helical flow path as seen in Fig. 5 of the reference. Brill '333 does not disclose a balloon wherein a plurality of restraining rings limit radial expansion of the balloon in the area of the rings while causing the balloon to inflate uniformly on each side of the rings so that

the balloon extends radially beyond the rings. Accordingly, applicants respectfully submit that claim 3 patentably defines over Brill '333 and is allowable.

Applicants submit that claims 1 through 5 as presented herein patentably distinguish over the art of record and are allowable. The application is in condition for allowance and favorable action thereon is respectfully requested. The Examiner is encouraged to contact the undersigned to resolve any remaining issues.

Respectfully submitted,

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